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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/801,023	03/07/2001	William C. Hunt	23134	4592

7590 06/25/2004

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EXAMINER

BUECHNER, PATRICK M

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 06/25/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/801,023

Applicant(s)

HUNT ET AL.

Examiner

Patrick M Buechner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 4/2/04.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 12-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 6-11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.


Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


Gene Mark
Supervisory Patent Examiner

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 3/7/01.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species I in the reply filed on 4/2/04 is acknowledged. The traversal is on the ground(s) that "A prior art search for species I would also cover species II and III." This is not found persuasive because it is a conclusory statement with no supporting evidence. Additionally applicant incorrectly states that claim 12 reads on species I. Claim 12 recites first and second tubes disposed to extend into the chamber and having check valves associated with the outlet of each tube. This material is not present in Species I and is clearly present in Species II, therefore, claim 12 reads on Species II and is not treated on the merits. The disposition of the claims is: 1-11, 15 and 16 examined on the merits; claims 12-14 withdrawn from further consideration.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless – (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 15 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Beth (US 4,651,765).

Beth discloses a system with a fluid actuated motor (8), located in a housing (12), the motor in communication with a fluid source (from port 22), a pump (injector 10, screw 36) driven by the motor, and an injector manifold (generally 38) that has an inlet portion (38)

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associated with an outlet of the pump (injector 10, screw 36). Beth also discloses diluting a chemical with the fluid (abstract).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beth.

Beth discloses a system, as discussed above, including a reaction tube (39) with a check valve (40) located in the outlet, and a chamber (2), having an inlet (right side of Figure 1) and an outlet (left side of Figure 1), that the reaction tube is connected to via a port (42).

Beth does not disclose a clutch, the reaction tube extending into the chamber or a check valve at the outlet of the pump.

A clutch in its broadest sense is merely a disengageable coupling, and as such is a well known machine element to one of ordinary skill in the art.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a disengageable coupling between the drive shaft and the driven shaft in order to ease maintenance of the parts individually.

While Beth shows the reaction tube ending at the port, extending the tube into the chamber is well within the capability of one having ordinary skill in the art, as a simple change in size of an existing part.

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Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to extend the reaction tube into the chamber in order to create non-laminar flow in the chamber in order to aid mixing of the components.

While Beth discloses a check valve at the outlet of the reaction tube, but not at the outlet of the pump, it would have been well within the capability of one having ordinary skill in the art to provide a duplicate check valve at the pump outlet.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide a duplicate check valve at the pump outlet in order to prevent backflow of product into the pump.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beth as applied to claims 1 and 4 above, and further in view of Ferster (US 3,219,071).

Beth discloses the limitations of claim 5, as discussed above, with the exception of the chamber having a transparent section.

Ferster discloses a tubular sight flow device.

Therefore, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the tubular chamber of Beth with the sight flow device of Ferster in order to provide visual inspection of the fluid flowing through the conduit (Ferster, column 1, lines 7-9).

Allowable Subject Matter

7. Claims 6-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lowery (US 4,270,637) discloses an adjustable spring clutch.

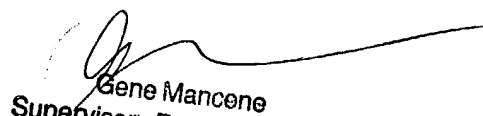
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick M Buechner whose telephone number is (703) 308-2602. The examiner can normally be reached on 7:00am-4:30pm M-Th and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Gene Mancene
Supervisory Patent Examiner
Group 3700